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# PORT OF LIVERPOOL



## ANNUAL REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

TO THE

## PORT HEALTH AUTHORITY

FOR THE YEAR

# 1964



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# PORT HEALTH AUTHORITY OF LIVERPOOL

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## REPORT FOR THE YEAR 1964

BY THE  
MEDICAL OFFICER OF HEALTH

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This is the 92nd Annual Report upon the work of the Liverpool Port Health Authority.

The Permanent Constitution of the Liverpool Port Health Authority defines the limits of the port for health purposes, as coincident with the limits laid down by H.M. Customs. By "The Appointment of the Port of Liverpool Order, 1956", the port of Liverpool is "An area bounded by a line:

(1) commencing at the termination of the port of Chester, namely at Hilbre Point (which is referred to as the Red Stones in Hoylake on the Point of Wirral in the Treasury Warrant dated 16th December, 1847, appointing the port of Chester): and

(2) continuing up the River Mersey on the Cheshire shore to Ince Ferry the western termination on the Cheshire shore of the port of Manchester, but excluding (where it touches the port of Manchester) so much of the Eastham Channel in the River Mersey as is enclosed by an imaginary line of dolphins on the east side of the Eastham Channel and, at a distance of five hundred and thirty-eight yards from the seaward extremity of the eight feet lock at Eastham, a further imaginary line to the foreshore at right angles to the first line: thence



(3) crossing the River Mersey in a supposed straight line to Dungeon Point being the western termination on the Lancashire shore of the port of Manchester: and

(4) continuing along the coast of the County of Lancaster to the southern boundary of the port of Preston, namely an imaginary line drawn in a true north-west direction from the inner north-west sea mark on the beach at Formby Point shown in the Admiralty chart of Liverpool Bay, dated 9th July, 1954.

The port shall include all islands, rivers, bays, channels, roads, bars, strands, harbours, havens, streams, and creeks (except the Manchester Ship Canal) within the specified limits and shall extend seaward to a distance of three miles from low water mark along the coast within the specified limits."

## SECTION I STAFF

TABLE A

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Professor Andrew B. Semple ... ..	Medical Officer of Health	5.12.52	V.R.D., M.D., Ch.B., D.P.H., Q.H.P.	Medical Officer of Health, City of Liverpool. Professor of Public Health, University of Liverpool. Supervising Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. J. B. Meredith Davies ... ..	Deputy Medical Officer of Health	1.5.53	M.D., B.S., D.P.H.	Deputy Medical Officer of Health, City of Liverpool. Medical Inspector under Aliens Order and the Commonwealth Immigrants Act. Lecturer in Public Health, University of Liverpool.
Dr. T. L. Hobday ...	Principal Medical Officer	resigned 30.9.64	M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.P.A., Barrister-at-Law.	Medical Inspector under Aliens Order and the Commonwealth Immigrants Act.
Dr. A. J. Graham ...	Assistant Medical Officer Principal Medical Officer	12.6.59 1.10.64	L.R.C.P., L.R.C.S.(Ed.), L.R.F.P.S.(Glas.), D.P.H.	Medical Inspector under Aliens Order and the Commonwealth Immigrants Act.

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Dr. F. W. Fairfax...	Boarding Medical Officer (part-time)	1.5.62	M.B., B.S., D.P.H.	Principal Medical Officer (Epidemiology), City of Liverpool, Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. E. Phillips ...	Boarding Medical Officer (part-time)	resigned 2.9.64	M.R.C.S., L.R.C.P.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. J. O'Brien ...	Boarding Medical Officer (part-time)	1.10.60	B.A., M.B., B.Ch., B.A.O., L.M.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. Smith ...	Boarding Medical Officer (part-time)	resigned 31.1.64	M.B., Ch.B., D.P.H.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. M. Jamaludeen	Boarding Medical Officer (part-time)	1.7.64	L.M.S.S.A., D.T.M. & H.	Assistant Medical Officer, City of Liverpool.
Dr. G. McCoy ...	Chief Port Health Inspector	7.6.46	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board. B.O.T. 1st Mate (Foreign-going) Certificate.	—
Dr. E. M. Dutton ...	Chief Port Food Inspector	10.1.60	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board. R.S.I. Meat and Other Foods Certificate.	—
Dr. G. M. Gillies ...	Administrative Assistant	6.5.59	L.G.E.B. Promotion Examination.	—

The staff also includes:

A Deputy Chief Port Health Inspector, three Port Health Inspectors and ten Rodent Operatives;

A Deputy Chief Port Food Inspector and four Port Food Inspectors. One Clerical Officer and one Shorthand Typist.

## SECTION II

**TABLE B**

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1964

Ships from	Number	Tonnage	Number Inspected		Number of ships reported as having, or having had during the voyage, infectious disease on board
			By Medical Officers	By Port Health Inspectors	
Foreign Ports...	6,724	16,073,151	372	3,969	123
Coastwise ...	4,581	4,198,018	—	276	—
Total ...	11,305	20,271,169	372	4,245	123

## SECTION III

**TABLE C**

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

### PASSENGER TRAFFIC

No. of passengers INWARDS	No. of passengers OUTWARDS
178,292	179,437

(These figures do not include traffic between Liverpool and Northern Ireland.)

### CARGO TRAFFIC

Principal Imports	Principal Exports
Flour, grain, etc., sugar, molasses, etc., wood, fruit and vegetables, cotton, ores and scraps, meat, feeding stuffs for animals, tea, butter, cheese, eggs, etc., cocoa, seeds or nuts for expressing oils, copper, coal, oils, fats, resins and gums, hemp, jute, sisal, etc., hides and skins, tobacco, rubber.	Iron and steel manufactures, chemicals and sodas, salt, machinery, pottery, glass and glassware, sugar, molasses, etc., flour, grain, etc., copper, brass, tin, etc., soap and oils, etc., ale, beer, wine, spirits, etc., cement, electrical goods, etc., paper, cardboard, etc., vehicles, aircraft, motor cars, locomotives, etc., bricks, cutlery, hardware, etc., fine goods.

Ships arrive in Liverpool from ports all over the world.



## SECTION IV INLAND BARGE TRAFFIC

The number of barges plying in and about the port of Liverpool is approximately 100, representing an estimated total of 12,000 tons.

### CANAL BOATS (Public Health Act, 1936, Part X)

The number of canal boats on the Liverpool Register has been still further reduced during 1964 and now totals only 34. Most of these boats are no longer used as dwellings, the crews sleeping ashore at night.

No. of boats inspected ...	...	...	...	...	34
No. of boats with contraventions	...	...	...	...	7
No. of contraventions	...	...	...	...	9
No. of contraventions corrected	...	...	...	...	6
No. of boats inspected for registration	...	...	...	...	Nil

## SECTION V WATER SUPPLY

There has been no change in the source of water supply for either the seaport or the airport.

During the year a total of 221 samples of water was taken from 32 ships and 12 tug boats. Fifty-one samples were considered to be unsatisfactory and appropriate advice given to the master, owners or agents.

There are no specially constructed water boats in use in the River Mersey, but under special circumstances, tug boats may supply fresh water to ships. Tug owners have been advised that any of their vessels utilised for this purpose should have separate fresh water pumps, hydrants and pipe lines, and that hoses and couplings used for normal deck service should not be used for supplying drinking water.

Good co-operation with officials of the Ministry of Transport has been maintained and joint action taken where required.

## SECTION VI PUBLIC HEALTH (SHIPS) REGULATIONS, 1952 to 1963

### (1) *List of Infected Areas*

The list of infected ports is as follows: Rangoon, Dar-es-Salaam, Rio de Janeiro, all ports in China, Indo-China, India, Pakistan, Belgian Congo, Liberia, Nigeria (including British Cameroons), Ghana, Colombia and Ecuador. Port Elizabeth was put on the list from 1st April, 1964, and was

removed therefrom on 30th November, 1964. The list is compiled from the Weekly Epidemiological Record of W.H.O. and is notified, in written form, to all officers of H.M. Customs, the river pilotage service, and Mersey Docks and Harbour Board.

(2) Incoming vessels from infected ports are required to notify their time of arrival by radio signals, to be sent not less than four hours before arrival in the river. Normally this signal is sent when the Mersey Pilot boards the vessel off Anglesey. Special arrangements are then made to board the vessel, which may either be met at the lock entrance or cleared by means of a hired tug while still in the river.

(3) *Notifications Other than by Radio*

Many shipping companies notify the estimated time of arrival of their vessels by letter or by telephone and we are always pleased to receive information on shipping movements. Radio messages from incoming vessels are however always required.

(4) There has been no change in the designated mooring stations allotted for the examination of shipping, although most vessels are examined while under way.

The number of ships visited by the boarding medical officers during the year was 372 of which 263 were from infected ports.

By arrangement with Manchester Port Health Authority, vessels bound for Manchester from infected ports are examined by the Liverpool Port Health Authority in the river. During 1964, 31 of the vessels boarded were bound for Manchester.

(5) (a) Cases of infectious disease, other than quarantinable disease, are accommodated in Fazakerley Isolation Hospital.

(b) There has been no change in the method of surveillance and follow-up of contacts of infectious diseases.

(c) Any disinfection which may be required in ships is done by inspectors of the Port Health Authority. During 1964, 82 disinfections after infectious disease were carried out. Infected beds and bedding were removed for steam disinfection.

From time to time, in order to strengthen the measures which may be taken against the risk of serious infection gaining entrance into the British Isles, amendments have been introduced to these Public Health (Ships)



Regulations and the latest of these came into force in August, 1963. These were cited as the Public Health (Ships) (Amendment) Regulations, 1963 and were mentioned in our report of that year.

They were particularly drawn up with a view to preventing the entry of that most serious of all quarantinable diseases, smallpox, into this country and they require that valid certificates of vaccination against smallpox be produced by all travellers (crew and passengers) from foreign ports, unless these are "excepted ports", and the Regulations name the continents of Africa, Asia and the Americas (excluding U.S.A. and Canada) as areas of endemic disease from which, in particular, all persons should be able to produce evidence of protection against this disease.

Every effort has been made by this Authority to use these Regulations in order to ensure a higher standard of vaccination among travellers. Warning circulars, a copy of which was published in last year's Annual Report and is again in this Report (page 11) were sent to all shipowners and shipping agents operating from the port of Liverpool before these enactments came into force and a Register has been compiled by the Port Health of all vaccination lists obtained from ships entering the river from abroad. During 1964, 1,212 ships were visited and 993 supplied the required vaccination lists. In all cases when lists were not available the certificates of vaccination were scrutinized. Any crew member found to have an invalid certificate or unable to produce a certificate was required to be vaccinated at the earliest possible time and the shipowners and agents have been actively co-operative and endeavoured to the utmost to keep the lists in a fully up-to-date manner. It would be of major assistance to us if all seamen could be required to have a valid certificate of vaccination before signing on ship's articles. Results from this procedure have been very gratifying. No large passenger vessel from an "endemic area" has failed to produce evidence that all on board had protection except where such vaccination was contra-indicated on medical grounds.

It is with regret, however, that a similar report cannot be made in the case of cruise vessels using the port. It must surely be agreed that anyone who is likely to be exposed to infection would be well advised to get protection against smallpox and all travellers going abroad should be told to get this done before embarking on a voyage.

There are few ports in the world which are not visited at some time or another by a ship direct from an area which is rife with disease, that is to say from an "endemic area", and therefore it must follow that the risk of infection, although perhaps small, can and does exist for unvaccinated persons going ashore from cruise vessels and into close contact with people who may be incubating smallpox contracted in an endemic area.

We make great efforts in the port to avoid any delay or inconvenience to ships and travellers on these vessels but the Medical Officer of Health of a Port Health Authority may however use his discretion as to what action he may take should evidence of protection not be produced and he may offer vaccination, or else place a person under surveillance or isolate such a person or apply both measures for a stated period of time.

Similar legislation is in force with regard to airports and is discussed briefly below.

### **PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1952 to 1963**

Liverpool is served by a major airport at Speke, 9 miles from the City centre. The Port Health Authority is responsible for enforcing the above Regulations in the airport. Passenger aircraft arriving at the airport come from other airports within the United Kingdom, Eire, and the Continent, and few aircraft arrive directly from infected areas. An examination room is maintained in the main airport building, and the medical officers on the Port staff, all of whom hold appointments as Medical Inspectors under the Aliens Order and the Commonwealth Immigrants Act, are available at the request of the Immigration Authorities to conduct inspections of persons arriving by air. All passengers arriving from an infected area are inspected and the validity of their vaccination certificates ascertained. Forewarning of such aircraft is given by H.M. Customs to the Port Health Authority and later information is supplied directly from Aircraft Control in the airport.

Indian crews for merchant ships are frequently flown in from India to join ships in the United Kingdom. In some cases these men arrive by air elsewhere, normally London, and proceed to Liverpool to join their ship; notification of this is always received from the Airport Medical Officer, London. On occasions chartered aircraft bring crews direct to Liverpool; such arrivals are kept under daily surveillance here until either the vessel sails or until the incubation periods for quarantinable diseases have expired.



TELEPHONE NO. CENTRAL 8433

EXT.....



PROFESSOR ANDREW B SEMPLE

F.R.C.S., M.D., D.P.H., Q.H.P.

Medical Officer of Health

PLEASE ADDRESS ALL CORRESPONDENCE  
TO THE MEDICAL OFFICER OF HEALTH

PORT HEALTH AUTHORITY,  
HEALTH DEPARTMENT,  
HATTON GARDEN,  
LIVERPOOL, 3.

YOUR REF.....

OUR REF. ....

Dear Sirs,

### **The Public Health (Ships) (Amendment) Regulations, 1963**

1. I am writing to draw your attention to certain features of the above Regulations which may affect ships under your control. The Regulations give Medical Officers of seaports power to require travellers from certain areas to produce a valid certificate of vaccination against smallpox. "Travellers" includes both crew and passengers. The Regulations apply, at the moment, to persons coming directly from Africa, Asia and any part of the American continent with the exception of U.S.A. and Canada. Should smallpox break out in any other part of the world, other areas may be added.

2. If a port medical officer is not satisfied that there is sufficient evidence that any traveller from the above areas is fully protected against smallpox, port health authorities are given additional powers which include the placing of such a person in isolation for some days.

3. In order to avoid delay in the medical clearance of vessels under your control, and to avoid any inconvenience to travellers, I suggest that the following documents are available to the medical officer, or his representative, when the vessel is boarded:

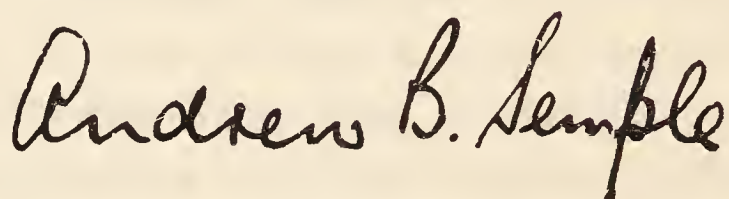
(a) A list bearing the last date of vaccination against smallpox of each member of the crew, the accuracy of this list being certified by the signature of the master.

(b) A separate list showing the same particulars in relation to passengers.

When a vessel arrives in Liverpool within 28 days of leaving an infected port the medical officer will invariably board this vessel and in addition to the above documents he will require a list of crew addresses and passenger addresses. It may, therefore, be convenient to add the smallpox vaccination dates to these lists. This is quite acceptable. In certain cases, of course, the medical officer may require to see the actual smallpox vaccination certificates. Where a vessel from the areas specified in paragraph one is not boarded by a medical officer and is cleared by the Customs, a port health inspector will take the vaccination lists from the vessel some time after docking.

4. It is suggested that your agents abroad should be acquainted with these Regulations in order that there should be no delay when the vessel arrives in Liverpool.

Yours faithfully,



Medical Officer of Health.

## SECTION VII SMALLPOX

No cases of smallpox were landed in the Port of Liverpool during the year, and there was no report of cases having been landed elsewhere from ships later docking in Liverpool.

### **Suspected Modified Smallpox**

One case of suspected modified smallpox was reported to have been removed to hospital from the s.s. *Jalaganga* at London on the 9th January, 1964, but this was later unconfirmed.

Smallpox consultants available are:—

Professor Andrew B. Semple, Health Department, Hatton Garden, Liverpool, 3.

Dr. T. L. Hobday, 43 Ullet Road, Liverpool, 17.

Professor A. W. Downie, Department of Bacteriology, The University, Liverpool, 3.

Dr. A. B. Christie, Fazakerley Hospital, Longmoor Lane, Liverpool, 9.

Facilities for laboratory diagnosis of smallpox are available in the Liverpool University Bacteriological Department.



**Dr. E. R. Peirce**

It is with great regret that we record the death on 29th August, 1964, of Dr. Edward Rowley Peirce, who was appointed Assistant Medical Officer to the Port Health Authority in 1923, and became Senior Medical Officer in 1927, a post which he held until his retirement in 1958. He had been responsible to four Medical Officers of Health for the Port Health Services, and his opinions, based upon great experience and judgment, were widely sought. In the difficult field of port health control he maintained a firm but flexible code, and earned the respect and confidence of all who were concerned with shipping and problems of food importation. He was an expert upon the major infectious diseases and was asked to remain a Ministry of Health Smallpox Consultant after he retired from the Port Health Authority.

**SECTION VIII  
VENEREAL DISEASE**

The incidence of venereal infection aboard ships showed no evidence of increase. All cases were referred for treatment to the Seamen's Dispensary.

Whenever possible the patient was interviewed by a Medical Officer or Port Health Inspector and was given advice together with a small card, showing the location of treatment centres with times of attendance. During 1964 nine were seen and referred for treatment.

During the year 185 Ministry of Health Warning Notices, with particulars of treatment centres, were supplied to the Mersey Docks & Harbour Board for display at suitable sites throughout the port.

**SECTION IX  
CASES OF NOTIFIABLE AND OTHER INFECTIOUS  
DISEASES IN SHIPS**

No cases of cholera, plague, relapsing fever, smallpox, typhus or yellow fever occurred in the port during 1964.

**Suspected Typhus Fever**

The m.v. *Anco Spur* arrived in Birkenhead from London on the 2nd October, 1964, and the Liverpool agents reported that the chief steward had been admitted to hospital at Flensburg on 2nd October with suspected

typhus fever. The vessel was visited and it was ascertained from the Master that a case of suspected paratyphoid fever (a messboy) had been removed to hospital at Rotterdam on the 28th September. The chief steward had landed at Rotterdam on the same day, travelled by air to Hamburg and later was admitted to hospital at Flensburg early on the 2nd October. He had telephoned the ship's agents at Liverpool stating that he was suffering from suspected typhus fever. No sickness was reported at London. There was no sickness on board during the vessel's stay in this port. Disinfestation and disinfection was carried out and the vessel sailed for Baton Rouge, U.S.A., early the following day. The Port Medical Officer at Baton Rouge was informed. It was later ascertained that the chief steward was not suffering from typhus fever.

### **Gastro Enteritis**

The m.v. *Centaur* arrived from Glasgow on the 8th January, 1964. Fourteen cases of gastro-enteritis with severe diarrhoea were reported during the vessel's stay in Glasgow and during the voyage to Liverpool. Specimens of faeces were obtained from members of the crew reported to have been ill and also from all members of the catering staff. Samples of water and food were taken and swabs from food handling surfaces and equipment were also taken and all submitted for bacteriological examination. No positive results were obtained and the vessel sailed for Sydney, New South Wales, on the 20th January.

The m.v. *Cienfuegos* arrived from South American ports on the 18th January and it was reported that a member of the crew was landed in San Juan, P.R., suffering from typhoid fever. Samples of water were taken and specimens of faeces from other members of the crew were submitted for bacteriological examination. No other sickness was reported and no positive results obtained from any of our investigations. The patient returned to his home in this country by air.

The m.v. *Dukesgarth* arrived from Pepel on the 14th July, 1964. During the voyage twelve members of the crew were reported to be suffering from severe diarrhoea. Three members of the crew were removed to hospital for observation and were later paid off. Samples of water, food and swabs from food preparation surfaces were submitted for bacteriological examination and proved negative. Thirty-seven specimens of faeces were also submitted for bacteriological examination. One of these was found to



be positive—*Shigella flexner* type 2, and this member of the crew had left the ship. The Medical Officer of Health concerned was notified. No further sickness was reported and the vessel sailed for North Africa on the 17th October, 1964.

The vessel *City of Brooklyn* arrived from Bombay via Port Said on Sunday, 28th July, 1964. No sickness was declared. Three days later it was learned from a general hospital that an Indian seaman had been admitted from this ship and later transferred to Fazakerley Hospital suffering from typhoid fever. Strict surveillance was placed on the ship forthwith, shore leave of immediate contacts stopped and inoculation against this disease given to all on board. Some European crew members had left the ship on leave and these had to be contacted and the Medical Officers of Health of all areas involved were advised.

A medical officer of this Authority visited the ship twice every day until the vessel sailed. Faecal specimens were obtained from all on board and fortunately no positive reports were given of these and no further cases were reported.

The m.v. *Pasadena* came from Vancouver and berthed at Liverpool on 21st December. No sickness was reported. On 23rd, twelve cases of gastro-enteritis were reported including children who had boarded the vessel with their mothers on 23rd December, 1964. An extensive investigation of all persons on board, of all foodstuffs, cooking and catering equipment and water was made. The vessel had taken water on arrival at Liverpool into tanks which, it was reported, were almost empty and had not been cleaned for about two years. Samples from these tanks showed severe contamination with high colony counts and presence of *E. coli* and other faecal organisms. The tanks were ordered to be drained, cleaned and the systems chlorinated.

During the year a total of 177 samples of water, 23 samples of food, 28 swabs from food handling equipment and 241 specimens of faeces were submitted to the Public Health Laboratories for bacteriological examination.

### **Typhoid Fever**

During and following the epidemic of typhoid fever in Aberdeen, within two days of advice from the Ministry of Health, all ships, stores and feeding

establishments throughout the dock area were visited by port health inspectors and a search made for suspected brands of corned beef.

Three hundred and eight-five ships and 59 feeding establishments were visited and stores checked. Suspected tins of corned beef were labelled and withdrawn from use, and the owner advised to return them to his supplier as soon as possible. Good co-operation was received from the Ministry of Transport Inspectors of Ships Provisions. Signals were passed to vessels at sea and all ships on arrival at the port were boarded and suspected corned beef was returned to the suppliers.

### **Accidental Death**

The Russian vessel s.s. *Valdailes* left Archangel on the 30th October, 1964, bound for Garston with a cargo of timber. No berth was available on her arrival in the Mersey and the vessel was required to anchor at the Bar for approximately four weeks.

It may be remembered that early in December winds of hurricane force were being experienced around this coast and the vessel had to proceed for shelter to Douglas Bay, I.O.M. During this procedure the bosun, aged 36 years, was struck on the head by a hatch cover on Monday, 7th December, and sustained a fracture of the skull which proved fatal.

This Authority was informed and the vessel was advised to return to Liverpool where a mooring place was allotted by the Mersey Docks and Harbour Board. The Coroner was advised and the death was certified by one of his officers. Garston Docks Authority and the police were informed and the body was landed and embalmed on 9th December for shipment to Russia.

A zinc coffin was used and after inspection by H.M. Customs a carte-note for export was given by them and the coffin placed on board the s.s. *Sheksnales* which left Liverpool on the 10th December for Archangel.

### **TABLE D**

The number of cases of infectious diseases landed from vessels arriving at Liverpool and those occurring in Liverpool-bound ships which were disposed of before arrival, are shown in the following tables:

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS  
DURING 1964

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
<b>Quarantinable Diseases</b>			
Cholera ... ..	—	—	—
Plague ... ..	—	—	—
Smallpox ... ..	—	—	—
Typhus Fever ... ..	—	—	—
Yellow Fever ... ..	—	—	—
Relapsing Fever ... ..	—	—	—
<b>Other Infectious Diseases</b>			
Chickenpox ... ..	8	17	20
Dysentery ... ..	1	1	2
Gastro-enteritis ... ..	2	18	6
German Measles ... ..	1	2	3
Glandular Fever ... ..	—	1	1
Infective Hepatitis ... ..	2	5	6
Influenza ... ..	—	2	2
Malaria ... ..	—	5	5
Measles... ..	8	1	5
Mumps ... ..	1	1	2
Pneumonia ... ..	2	4	6
Pyrexia (unidentified) ... ..	—	6	5
Tuberculosis ... ..	3	12	14
Typhoid Fever... ..	—	1	1
Total ... ..	28	76	78



CASES OF INFECTIOUS SICKNESS OCCURRING IN VESSELS DURING THE VOYAGE  
BUT DISPOSED OF PRIOR TO ARRIVAL. YEAR 1964

Diseases						No. of Cases during Year		No. of Vessels concerned
						Passengers	Crew	
<b>Quarantinable Diseases</b>								
Cholera...	...	...	...	...	...	—	—	—
Plague ...	...	...	...	...	...	—	—	—
Smallpox	...	...	...	...	...	—	1	1
Typhus Fever ...	...	...	...	...	...	—	—	—
Yellow Fever ...	...	...	...	...	...	—	—	—
<b>Other Infectious Diseases</b>								
Chickenpox ...	...	...	...	...	...	3	6	8
Dysentery ...	...	...	...	...	...	—	1	1
Gastro-enteritis	...	...	...	...	...	—	2	2
German Measles	...	...	...	...	...	4	1	4
Infective Hepatitis	...	...	...	...	...	—	3	3
Influenza ...	...	...	...	...	...	2	1	3
Malaria	...	...	...	...	...	—	2	2
Measles...	...	...	...	...	...	4	—	3
Mumps ...	...	...	...	...	...	11	1	10
Paratyphoid Fever	...	...	...	...	...	—	1	1
Pneumonia ...	...	...	...	...	...	—	2	2
Scarlet Fever ...	...	...	...	...	...	1	—	1
Tuberculosis ...	...	...	...	...	...	1	2	3
Typhoid Fever...	...	...	...	...	...	—	1	1
Total	...	...	...	...	...	26	24	45



## CASES LANDED FROM OTHER SHIPS (COASTWISE VESSELS)

Disease	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
—	—	—	—

**SECTION X****OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS**

The use of malarial suppressants in ships entering the port from affected areas has continued to keep the incidence of this disease at a low figure. Five cases of malaria or suspected malaria were reported from five ships during the year.

**SECTION XI****MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE**

No rodent plague was discovered either in ships or ashore. Two suspected rats from a ship were found on bacteriological examination to be negative for plague.

**SECTION XII****MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS**

The port is divided into four districts which are shared between the port health inspectors as the staffing position permits. A rat searcher and a rat catcher are allotted to each district: the rat searcher is responsible for searching for evidence of rats, and the rat catcher for dealing with rat infestation. Each rodent operative is given specific tasks daily, to be carried out at set times, and the work is checked by cross visits.

Foreign-going ships entering the port are visited by a port health inspector and a rat searcher as soon as possible after docking. Traps are set in all ships from infected ports, and in all foreign-going ships when rat evidence is reported where time in port permits.

In view of the reduced danger from plague, the number of rats now sent for bacteriological investigation has been reduced.

### **Ratguards**

Foreign-going ships, whether arriving from abroad, or proceeding coastwise, are visited on arrival by a port health inspector, and advised to fit ratguards on all moorings. Ratguards should be of sheet metal at least three feet in diameter, with sharp edged circumferences, or instead the mooring ropes may be parcelled with canvas, or sacking coated with tar. This tar must be kept in a sticky condition. Ships' officers are also advised not to leave cargo nets hanging between the ship and shore at night.

### **Deratting**

Deratting in ships is accomplished by:—

- (1) Routine trapping by port health rat catchers.
- (2) Trapping and/or poisoning by rat catchers employed by the shipping companies.
- (3) Fumigation with hydro-cyanic acid gas or sulphur dioxide. Only fumigation is approved for the issue of the International Deratting Certificate. Rodenticides are not approved for this purpose in the port of Liverpool. The contractors undertaking this work are as follows:—

#### **(a) Ratcatching**

Rentokil Laboratories Limited.  
Hivey Fumigation Company.  
A. Sewell.

#### **(b) Fumigators**

Rentokil Laboratories Limited.  
Hivey Fumigation Company.

Deratting in dock premises is accomplished by:—

- (1) Routine trapping by port health rat catchers.
- (2) Routine trapping and poisoning by rat catchers employed by the Mersey Docks and Harbour Board.
- (3) Trapping and poisoning by private rat-catching firms employed by shipping companies and warehouse owners.

### **Examination of Ships for Rats**

This is accomplished by enquiries and search by port health rat searchers, who search foreign-going ships on arrival and also make periodic searches

during the discharge of cargo. Any ship for which a deratting or deratting exemption certificate application has been made is searched throughout when the cargo spaces are empty. In the year 602 vessels were so examined. Immediate investigation is undertaken of reports from ships' masters and other officers, dock workers, and privately employed rat catchers.

### Rat Proofing

When temporary or permanent rat harbourage is discovered in ships, the master and the owners (or agents) are informed and advised how to eliminate it: every effort is made to see that vessels are made reasonably ratproof before a deratting exemption certificate is issued.

Regular surveys are made of all premises in the vicinity of ships, and no unnecessary accumulations of stores or gear are permitted.

**TABLE E**

#### RATS DESTROYED

##### Rodents Destroyed During the Year 1964 in Ships from Foreign Ports

Category										Number
Black Rats	...	...	...	...	...	...	...	...	...	487
Brown Rats	...	...	...	...	...	...	...	...	...	80
Species not known	...	...	...	...	...	...	...	...	...	—
Sent for examination	...	...	...	...	...	...	...	...	...	78
Infected with plague	...	...	...	...	...	...	...	...	...	—

##### Rodents Destroyed During the Year 1964 in Docks, Quays, Wharves and Warehouses

Category										Number
Black Rats	...	...	...	...	...	...	...	...	...	604
Brown Rats	...	...	...	...	...	...	...	...	...	785
Species not known	...	...	...	...	...	...	...	...	...	—
Sent for examination	...	...	...	...	...	...	...	...	...	15
Infected with plague	...	...	...	...	...	...	...	...	...	—

Number of mice destroyed in vessels ... .. 188

Number of mice destroyed on quays ... .. 608

Number of mice examined from vessels and quays ... .. 38

In addition to the above, 2,965 rats and 77 mice were caught and destroyed by the Dock Board rat catchers and private agencies.



Number of Visits to Vessels by Rat Catchers ...	...	...	4,145
Number of Visits to Vessels by Rat Searchers	...	...	5,473
Number of Visits to Quays, Sheds, etc., by Inspectors	...	...	2,408
Number of Visits to Quays, Sheds, etc., by Rat Searchers	...	...	2,029
Number of Visits to Quays, Sheds, etc., by Rat Catchers	...	...	23,274

**TABLE F**  
**DERATTING CERTIFICATES ISSUED**  
**Deratting Certificates and Deratting Exemption Certificates Issued During the Year 1964**

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	Total	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
31	8	—	—	39	563	602

**Rodent Control (Combined Return)**

The combined known returns of rats and mice caught and destroyed in the Port Health area, by port health and other rat catchers, are not completely comprehensive and taken over the past five years indicate some variations. It cannot be said that any premises in the port area are heavily infested with rats, but constant vigilance is required, and every infestation, however small, must be located and eliminated before it becomes established.

Year	In Ships		On Shore		All Sources		Total Rodents destroyed
	Rats	Mice	Rats	Mice	Rats	Mice	
1960... ..	574	329	1,194	524	4,401	899	5,300
1961... ..	534	155	1,821	690	4,614	845	5,459
1962... ..	279	91	1,905	533	4,613	624	5,237
1963... ..	266	202	1,491	569	4,346	829	5,175
1964... ..	567	188	1,389	608	4,921	873	5,794

**SECTION XIII**  
**INSPECTION OF SHIPS**

The continued shortage of qualified port health inspectors has made it virtually impossible to inspect all ships entering the port. Careful attention however has been given to all immediate requirements and routine inspections were carried out whenever possible.



The method of reporting ship inspections by the new card index system shown last year was continued throughout 1964.

The attention of the ship's master or officer-in-charge is drawn to any defect found and a verbal request made for it to be remedied. A written memorandum is left on board and if it is considered advisable, a letter detailing the defects is sent to the shipowner or agent. Whenever it is not possible to abate a nuisance during the vessel's stay in Liverpool and the ship is proceeding to another British port, notification is sent to the medical officer of the port concerned.

**TABLE G**  
**INSPECTIONS AND NOTICES**  
Year 1964

Nature and Number of Inspections					Notices Served		Result of Serving Notices	
					Statutory	Other Notices		
<b>Nature of Inspection</b>								Nuisances Remedied
Dirty Crew Quarters	...	...	—	none	20	20		
Verminous Quarters...	...	...	—	„	958	920	„	
Dirty Washhouses or W.C.'s	...	...	—	„	14	14	„	
Foul Water Tanks	...	...	—	„	—	—	„	
Foul Bilges	...	...	—	„	—	—	„	
Foul or Choked W.C.'s	...	...	—	„	3	3	„	
Accumulations of offensive refuse	...	...	—	„	9	9	„	
Dirty Pantries and Galleys	...	...	—	„	20	20	„	
Dirty Storerooms	...	...	—	„	14	14	„	
Leaky Deckheads	...	...	—	„	1	—	„	
Defective Heating System	...	...	—	„	—	—	„	
Defective Bulkheads...	...	...	—	„	—	—	„	
Defective Portlights, Skylights, etc.	...	...	—	„	8	8	„	
Defective or Inadequate Ventilation	...	...	—	„	—	—	„	
Defective Deck Covering	...	...	—	„	—	—	„	
Gear Stowed in Crew's Quarters	...	...	—	„	—	—	„	
Damp Quarters	...	...	—	„	3	3	„	
Rat Harbourage	...	...	—	„	—	—	„	
Defective W.C. Fittings	...	...	—	„	1	1	„	
Defective Soil Pipes	...	...	—	„	1	1	„	
Defective Waste Pipes or Scuppers	...	...	—	„	—	—	„	
Defective Washing Facilities	...	...	—	„	1	1	„	
Inadequate Lighting	...	...	—	„	—	—	„	
Smoke Nuisances	...	...	—	„	45	45	„	
W.C.'s discharging on Quay	...	...	—	„	67	67	„	
Miscellaneous...	...	...	—	„	20	18	„	
Number of Inspections					...	...	4,245	
Total					...	...	4,245	—
							1,185	1,144
							„	„

NATIONALITY OF SHIPS VISITED  
YEAR 1964

Nationality							Visits	Re-visits	Total
British ...	...	...	...	...	...	...	2,498	99	2,597
Norwegian ...	...	...	...	...	...	...	259	3	262
Dutch ...	...	...	...	...	...	...	219	2	221
West German ...	...	...	...	...	...	...	197	—	197
Liberian ...	...	...	...	...	...	...	121	3	124
Spanish ...	...	...	...	...	...	...	112	6	118
Greek ...	...	...	...	...	...	...	107	10	117
Swedish ...	...	...	...	...	...	...	95	—	95
Danish ...	...	...	...	...	...	...	92	1	93
Indian ...	...	...	...	...	...	...	68	9	77
American ...	...	...	...	...	...	...	67	—	67
Russian ...	...	...	...	...	...	...	63	—	63
Finnish ...	...	...	...	...	...	...	37	—	37
Japanese ...	...	...	...	...	...	...	30	1	31
United Arab Republican ...	...	...	...	...	...	...	24	4	28
Belgian ...	...	...	...	...	...	...	21	1	22
Polish ...	...	...	...	...	...	...	21	—	21
Turkish ...	...	...	...	...	...	...	20	2	22
Swiss ...	...	...	...	...	...	...	18	2	20
Panamanian ...	...	...	...	...	...	...	17	1	18
Yugoslavian ...	...	...	...	...	...	...	17	1	18
Italian ...	...	...	...	...	...	...	16	—	16
Argentinian ...	...	...	...	...	...	...	15	3	18
Nigerian ...	...	...	...	...	...	...	14	—	14
South African ...	...	...	...	...	...	...	14	—	14
Sudanese... ..	...	...	...	...	...	...	10	3	13
French ...	...	...	...	...	...	...	9	—	9
Israeli ...	...	...	...	...	...	...	9	—	9
Pakistani ...	...	...	...	...	...	...	9	2	11
East German ...	...	...	...	...	...	...	7	1	8
Ghanian ...	...	...	...	...	...	...	7	1	8
Lebanese... ..	...	...	...	...	...	...	7	1	8
Brazilian ...	...	...	...	...	...	...	4	1	5
Chilean ...	...	...	...	...	...	...	4	—	4
Hondurasian ...	...	...	...	...	...	...	4	1	5
Icelandic ...	...	...	...	...	...	...	3	1	4
Burmese ...	...	...	...	...	...	...	2	—	2
Roumanian ...	...	...	...	...	...	...	2	—	2
Canadian... ..	...	...	...	...	...	...	1	—	1
Chinese ...	...	...	...	...	...	...	1	—	1
Iraqi ...	...	...	...	...	...	...	1	—	1
Moroccan ...	...	...	...	...	...	...	1	1	2
Portuguese ...	...	...	...	...	...	...	1	—	1
Uruguayan ...	...	...	...	...	...	...	1	1	2
Totals ...	...	...	...	...	...	...	4,245	161	4,406

## INSPECTION OF DOCK PREMISES

Routine inspection of dock premises was maintained during the year and the following defects and nuisances were observed and remedied.

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harborage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	2	—	36	63	53	1	20	—	—	—	—
Quays ...	—	—	—	—	—	—	3	4	93	—	2	—	—	—	—
Roadways ...	—	—	—	—	—	—	2	—	256	4	9	—	—	—	—
Canteens ...	—	—	—	1	15	7	3	15	4	—	17	2	3	1	25
Factories ...	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—
Warehouses	—	—	—	—	—	1	4	14	—	—	2	—	—	—	—
Latrines ...	—	—	—	1	—	1	—	—	1	1	27	—	—	—	—
Airport ...	—	—	—	—	—	2	3	6	—	—	2	—	—	2	—
Offices ...	—	—	—	—	2	—	—	1	—	—	—	—	—	2	—
Refuse Tip ...	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Total ...	—	—	—	2	19	11	53	105	407	6	79	3	3	5	25

Modernisation of dock latrines in the port area is still proceeding and we are now pleased to note that the construction of new wash places for dock workers is under way. In the Garston dock area the new dock workers' amenity block has been in use for some time and has been greatly appreciated.

### Ships' Sewage Disposal

At the request of an official of the Board of Trade four samples of sewage effluent after passing through the sewage disposal plant fitted in the m.v. *Wharanui* and after treatment by a new chemical process were taken and submitted for bacteriological examination. All four samples proved to be almost entirely free from bacteria. These excellent results should be of interest to all Dock and Port Health Authorities.



## **THE FOOD HYGIENE (DOCKS, CARRIERS, ETC.) REGULATIONS, 1960**

These Regulations provide that every berth where "open food" is handled should be clean and suitable and that appropriate equipment, washing facilities and protective clothing for dock workers are provided.

During the year 207 ships arrived in the port carrying consignments of "open food" and in each case the berth was inspected prior to discharge of the cargo by a port health inspector. The majority of ships carrying consignments of "open food" are however loaded with "mixed" cargoes and although some of the foodstuffs may be packed in cartons and so protected from contamination, when the cartons are opened for inspection, the contents must be considered "unprotected" or "open". We are then presented with the problem of ensuring that the berth is maintained in a clean condition and kept cleared during the time taken to discharge the vessel of anything which could cause contamination. One hundred and fifty-two berths required cleaning before open food could be handled and on 84 occasions other cargo had to be moved or covered.

In addition railway trucks, motor vehicles and food handling equipment for this type of cargo must be clean and frequently adapted so as to avoid any possibility of contamination. Constant vigilance must be maintained during the handling of "open" food and continued until it is moved from the port. A good standard has been reached during the year and in most cases good co-operation has been received from those concerned, but there is still room for improvement especially in the case of some road vehicles. A firm of master porters who specialise in handling food cargoes introduced a conveyor belt system with a telescopic elevator. This was covered with a large nylon tent and was also provided with small conveyors to carry foodstuffs to waiting vehicles. Lamb carcasses and cartons of foodstuffs were successfully discharged with this equipment. The actual stacking in the vehicles and loading on the conveyor belt was done by hand, but otherwise the handling was completely mechanised.

The following "Code of Practice" has been drawn up by this Authority as a guide to requirements under the Food Hygiene (Docks, Carriers, Etc.) Regulations, 1960, and has been issued to officials of the Harbour Board, Master Porters, ship and vehicle owners and others concerned in the discharge and handling of "open" food.

**LIVERPOOL PORT HEALTH AUTHORITY  
CODE OF PRACTICE FOR VESSELS UNLOADING  
UNPROTECTED FOOD AT LIVERPOOL DOCKS**

**(The Food Hygiene (Docks, Carriers, etc.) Regulations, 1960)**

1. Any foodstuff which is not wrapped in such a way as to protect it from contamination is considered "open" food and it is to this type of consignment that the Regulations particularly apply. I have decided that meat, when protected only by mutton cloths, must be considered "open".

2. Every effort should be made to ensure that a dock shed, in which open foodstuffs of any type are handled, is clean and that, in particular, there are no hides, bonemeal, or wool in such a position that the foodstuff concerned can be contaminated. The aim should be to have the dock shed quite clear of such material, but, for the time being, I am prepared to agree that open food may be discharged in such sheds provided any cargoes, likely to cause contamination, are completely covered. If there is a clean bay, empty of material likely to cause contamination, on each side of the meat bay, then cargoes in the next bay but one, on either side, need not be covered. Wool should not, in any circumstances, be in the same compartment as meat.

3. Sledges used for discharging open food from ships should be kept clean: in practice, I recommend that the sledges should be metal. Bogie tops should be covered with hard impervious paint: lime-washing is not acceptable.

4. Washing facilities should be provided wherever open food is handled. Portable hand washers are acceptable.

5. It is most important that all wagons or containers, which are to be loaded, are clean and free from any sort of debris. I cannot permit the loading of meat into dirty wagons or containers.

6. When open food is handled, protective clothing, of an approved pattern, must be worn by those handling the foodstuff.

7. The above Code of Practice is proposed in order to take account of difficulties during the interim period and it is hoped that everything will be done to increase the standard of hygiene in the discharge of food cargoes.



## **SECTION XIV**

### **PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1934/48**

The Public Health (Shellfish) Regulations, 1934/48, authorise local authorities to issue Orders controlling the disposal of shellfish which have been collected from polluted areas. Such an Order was made by the Liverpool Corporation in 1951, and this Order stated that shellfish might not be collected for sale from within the limits of the port of Liverpool, unless before disposal they were either cleansed at an establishment approved by the Ministry, or subjected to a process of sterilisation at premises and in apparatus approved by the Liverpool Port Health Authority.

Warning notices that "Shellfish taken from this area are likely to be polluted, and could cause serious illness to those consuming them", are erected at suitable sites on the Lancashire and Cheshire approaches to the shore on each side of the River Mersey. The notices which are exposed to the sea and weather, often become partly obliterated and occasionally damaged or removed. They are renewed when necessary.

No cases of food poisoning or other sickness resulting from the consumption of shellfish were reported. No prosecutions were instituted during the year.

### **SMOKE CONTROL**

The Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, limit the emission for certain periods of this type of smoke by certain types of furnaces, and therefore, it is the concern of all Masters and Chief Engineers of vessels in the Port of Liverpool, to which these Regulations apply, to ensure strict adherence will be paid to them.

During the year it was necessary on 45 occasions for attention to be drawn to emission of smoke, contrary to the Regulations but fortunately in none of these instances, was it found necessary to institute proceedings against the offenders.

### **DOCK CANTEENS**

It is the duty of the Port Health Authority to inspect routinely all canteens in the dock estate in order to ensure that the requirements laid down by the Food Hygiene (General) Regulations, 1960, with regard to food handling and washing facilities available to the staff of these canteens are properly maintained and carried out.



The structure and furnishings of many of these establishments vary considerably but nevertheless considerable effort has been made with some success to overcome many of the main difficulties. Condensation, a serious problem always present under certain weather conditions in Nissen hut type buildings, has been overcome in a few instances by the use of special paint or linings and we have been given to understand that the replacement of one of these canteens which is particularly affected by condensation is being considered. Much could be done however to improve the lighting and heating of others and the approaches to one or two could, perhaps, be improved in order to prevent mud and dirt being carried into the building during bad weather.

The senseless vandalism which is sometimes practised on chairs and tables must be a persistent deterrent to the proprietor from replacing breakages in a few of these canteens.

A very searching investigation was carried out on every canteen numbering in all 47, on the dock estate in December by the Principal Medical Officer (Port) and the Chief Port Health Inspector and none was found which did not comply with the requirements although the facilities available in some were better than others mainly because of size of accommodation available in the premises and of the age of the structure.

Canteens owned and operated by shipping companies for their dock employees were, on the whole, of a high standard.

During the year 1,136 separate inspections were made and 93 defects noted and abated.

### **RADIOACTIVE MATERIALS**

All ships visiting the port and carrying this type of cargo were visited by a port health inspector.

Information is received from the Mersey Docks and Harbour Board concerning ships entering or leaving the port with this type of cargo and the amount of radioactive or other potentially dangerous cargo material loaded or discharged.

The amount of radioactive cargo, stowage, handling, destination, marking of packages, condition, distance from crew accommodation and proximity to foodstuffs are noted.

Number of ships visited loading radioactive cargo...	...	69
Number of ships visited discharging radioactive cargo	...	38
Total	...	107

## SECTION XV

### MEDICAL INSPECTION OF ALIENS AND COMMONWEALTH IMMIGRANTS

Medical Officers holding Warrants of Appointment as medical inspectors of Aliens and Commonwealth Immigrants are:—

Professor Andrew B. Semple.  
Dr. J. B. Meredith Davies.  
Dr. T. L. Hobday (resigned 30.9.64).  
Dr. A. J. Graham.  
Dr. C. F. W. Fairfax.  
Dr. S. Smith (resigned 31.1.64).  
Dr. D. E. Phillips (resigned 2.9.64).  
Dr. M. J. O'Brien.

No other staff are regularly engaged on this work, though the medical officers may be assisted by health visitors from the City staff when necessary. Normally, immigration officers refer to the medical officers any passengers whom they have reason to believe may require examination under the Aliens Order or the Commonwealth Immigrants Act; a medical officer is therefore always present during the disembarkation of passengers from trans-Atlantic liners.

#### **Details of Aliens and Commonwealth Immigrants during 1964**

Total number of vessels carrying Alien passengers	...	...	...	1,247
Number of vessels dealt with by the Medical Inspectors	...	...	...	136
Number of aircraft dealt with by the Medical Inspectors	...	...	...	—
Total number of aliens landed in the Port	...	...	...	9,148
Number subjected to detailed examination by Medical Inspectors...	...	...	...	19
Certificates issued by Medical Inspectors	...	...	...	1
Total number of Commonwealth Immigrants landed in the Port	...	...	...	7,631
Number medically examined	...	...	...	415
Certificates issued by Medical Inspectors	...	...	...	6

Medical inspection of alien and Commonwealth immigrant passengers is normally conducted either in the ship itself, or, in relation to aircraft, in the examination room at Liverpool Airport.

## MISCELLANEOUS

### Industry Advances Exhibition

The above exhibition, sponsored by the Liverpool City Council with the co-operation of the Mersey Docks and Harbour Board, projecting the vital role played by industrial Merseyside in the economic life of Britain, was held in a dock shed in the West Canning Dock area.

A Bailey bridge was built over the Canning Dock by The 107th Corps Engineer Regiment (T.A.) and moored north and south of the bridge, alongside the exhibition, was the Clubship *Landfall*, specially chartered from the Master Mariners' Club to provide a restaurant, and also a barge adapted to serve as a snack bar. Officials of the Port Health Authority made visits prior to, and during the exhibition to ensure that food hygiene and sanitary requirements were carried out.

## FOOD INSPECTION

### DESICCATED COCONUT FROM CEYLON

The improvement in the bacteriological standard of this commodity, which was mentioned in last year's Annual Report, was maintained during 1964 and the system of periodic check sampling, without detention, instituted in June 1963, was continued throughout the year.

During the year 583 samples were examined and of these only one was positive for salmonellae (*Salmonella newport*—a designated type). This represented 0.17% of the samples submitted—a further improvement on last year's record low figure.

The results since 1961 are as follows:—

Year		Salmonella Infection Rate
1961...	...	3.84%
1962...	...	2.597%
1963...	...	0.468%
1964...	...	0.171%

Following the usual practice, the one positive result mentioned above was reported to the Ceylon Authorities, who were informed of the number of the offending mill, as indicated by a code on the package, so as to assist them in taking appropriate action.



### **Ore dust contamination of Desiccated Coconut**

The vessel *Asphalion* arrived from Ceylon on 11th July, 1964, with a consignment of 8,560 x 100-lb. bags of desiccated coconut. On inspection a high proportion of the bags was found to be contaminated by dust. This occurred because a consignment of zinc and lead-bearing ore had been stowed in the same space as the coconut without adequate precautions being taken to protect the coconut from dust from the handling and transit of the ore. All the contaminated but otherwise sound bags were ordered to be cleaned by brushing, before being loaded for delivery from the quay. After inspection of the remainder 214 torn bags were rejected, 122 were destroyed at a local tip and 92 were utilised in the preparation of animal food at a local establishment.

### **Desiccated Coconut from the Friendly Isles (Tonga)**

During 1964, 700 bags of desiccated coconut were imported from Tonga. Twenty-five samples were taken and the Public Health Laboratory reported all of these negative for salmonellae.

## **MEAT AND MEAT PRODUCTS**

### **Meat from U.S.A.**

On the 10th February, a consignment of 110 cartons of beef tongues from the *Prinses Irene* was rejected because of decomposition. These tongues were said to have been derived from papain-injected animals. Papain is a tenderizing enzyme which is injected into a vein before slaughter of the beast and breaks down the animal tissue during the cooking process. There was no evidence that the decomposition had developed during transit from U.S.A. to Liverpool. In the same month, 12.7% of a consignment of 79 cartons of beef kidneys from the vessel *Parthia* was rejected for the same reason.

On the 23rd March, the vessel *Saxonia* arrived at Liverpool with a consignment of 195 cartons of frozen ox tongues. A 100% examination showed decomposition and 108 cartons were rejected (6,593-lbs. nett).

Two consignments of frozen beef livers landed from the vessel *Birgit Ragne* in August were found to have had the hepatic glands removed from some of the livers. Other livers were diseased or decomposed and the consignment was rejected. The consignee decided to have this meat processed by sterilisation and used as pet food.

In the case of another consignment, similarly affected, the shipper and the consignee have not yet decided whether to submit it to 100% examination or dispose of the meat for purposes other than human consumption.

Two further consignments of frozen beef kidneys were rejected because of decomposition following 100% examination.

In November, 52 out of 95 cartons of frozen beef kidneys from the vessel *Mathura* were rejected on account of decomposition.

Another consignment of 279 cartons of frozen beef kidneys from the vessel *Manipur* arrived at Liverpool via Manchester and a 5% examination showed decomposition in 20.5% of the kidneys examined. The shipper and the consignee are still negotiating on whether to submit this consignment for 100% examination or to apply to have it disposed of for purposes other than human consumption.

Although landed at Manchester on 21st November, 1964, the consignment was transferred to Liverpool for inspection at the request of the consignee and Manchester Port Health Authority, due to lack of facilities to carry out the work in Manchester.

The vessel *Maj Ragne* arrived on 3rd September from U.S.A. A 5% examination of a consignment of 1,023 cartons of frozen beef livers showed that the hepatic glands had been removed from 26.6% of the livers examined and 27.6% were found to be diseased. The meat was rejected. The consignee again decided to dispose of the consignment to an approved petfood processor for sterilisation rather than submit it to a 100% examination.

### **Meat from Australia**

In April, a consignment of 750 carcasses of ewe mutton arrived on the vessel *Port Sydney*. On 100% examination 22 carcasses were found to be affected by caseous lymphadenitis. Twenty-two pieces of mutton, totalling 158-lbs. were rejected.

A consignment of 840 cartons of frozen boneless mutton landed from the *Saxonia* in April, was found on inspection to have masses of ice adhering to some of the cartons. The source of this ice was not established. The consignment had been shipped to U.S.A. from Australia and then transhipped and brought to Liverpool. The ice bound cartons (114 in all) were



detained and samples sent to the Public Health Laboratory. Bacteriological and chemical tests produced no evidence that the ice originated from a contaminated source. The 114 cartons were released.

In August the vessel *Surrey* discharged a consignment of 310 cartons of frozen boneless ox crops. Fourteen cartons (4.5% of the consignment) were rejected because of decomposition.

### **Meat from Argentina**

The vessel *Rio Primero* docked on 28th April, 1964, with a consignment of 842 cartons of frozen beef livers. The results of a 5% sampling showed that 7.29% of the livers were affected by hydatid cysts or tuberculosis. A 10% examination was then done and showed 8.6% of the livers to be affected. Other ports of the United Kingdom and the Ministry of Agriculture Fisheries and Food were informed of the situation. A reply from the Ministry on 15th May stated that approval for the export of meat from the establishment concerned had been withdrawn. The importer declined to withdraw the consignment from sale for human consumption and it was therefore necessary to do a 100% examination. The results showed 669 diseased livers out of a total of 3,465 actually examined. Of these 503 were affected by hydatid cysts, 90 by decomposition, 30 by peritonitis and others by cavernous haemangioma (24), tuberculosis (9), multiple abscesses (8) distomatosis (3).

### **Meat from New Zealand**

The vessel *Port Townsville* discharged a consignment of 500 carcasses of ewe mutton in October. Caseous lymphadenitis was found in 3% of the carcasses. One carcass (60-lbs.) and parts of 14 carcasses totalling 186-lbs were rejected.

### **Meat from Canada**

In May, a consignment of 187 cartons of frozen minced pork was brought to this port by the *Empress of Canada*. Examination showed that this importation consisted of minced pork (mostly fat) which had been passed through a  $\frac{3}{8}$ " plate. The meat was therefore, considered to be prohibited scrap meat which under the Imported Food Regulations, 1937, is defined as being of such shape and in such condition as to afford insufficient means of identification with a definite part of the carcass. The consignment was rejected as unfit for human consumption.



### Edible Animal Fats conveyed in Bulk

The following figures show that in 1964 the importation of edible animal fats in bulk reached a record high level.

Commodity	Origin	No. of Ships	No. of Consignments	Tonnage
Lard ... ..	U.S.A. ... ..	74	262	136,250
Lard ... ..	France and Belgium	5	8	2,774
Edible beef tallow ...	New Zealand ...	1	2	206
Edible beef tallow ...	Australia ... ..	1	1	100
Total ... ..	All sources ... ..	81	273	139,330

The figures for 1963 were 51 ships, with 197 consignments totalling 96,638 tons.

The consignments from New Zealand were the first instance of this commodity arriving at Liverpool in bulk. Two samples were submitted to the City Analyst and found to be satisfactory.

A recommendation was made to the Ministry of Agriculture Fisheries and Food that the official certificates accompanying edible fats in bulk should guarantee the cleanliness of the containers, e.g. tanks, before filling and should state the quantity in each tank.

In November the vessel *Saxonia* arrived with a consignment of 450 tons of lard in bulk. It was found that owing to a fractured sounding pipe about 24 tons had leaked into the bilges, where gross contamination had occurred. The rest of the consignment was unaffected. The contaminated part was later released for technical purposes other than human consumption, on receipt of a written undertaking to this effect from the importers.

### RECOGNISED OFFICIAL CERTIFICATE PROCEDURE

Several cases occurred during 1964 of irregularities in connection with the Recognised Official Certificate Procedure. In some instances no official certificate of the country of origin accompanied the consignments but where these were produced a few days later the consignments were released, unless found to be unfit for human consumption, in which case they were released for industrial use under written guarantee. Some consignments which had no official certificates were re-exported and where, in some instances, the official certificates attached to consignments of meat from the U.S.A. had

been revoked as from 1st October, 1964, by Circular FSH/6/64, the consignments were only released on receipt of notification by the Ministry of Agriculture Fisheries and Food that the certificates were to be retained until 1st March, 1965. A consignment from Australia was detained since it was accompanied by a certificate which had been revoked on 1st December, 1963, under Circular FSH/20/64, after notice was given in the *London Gazette* of 16th October of intention to revoke on that date. This consignment was also released later.

### **Meat from China**

The vessel *Melampus* arrived from Hong Kong in March. The cargo included three cases of canned pork sausages not accompanied by official certificates. The cases were re-exported to Hong Kong. Four other consignments having no official certificates arrived during June, July and November. Two of these were re-exported to China, one was re-exported to Spain and one was detained pending a decision on whether the consignment was to be re-exported or diverted for industrial use.

### **Meat and Meat Products from U.S.A.**

The vessel *Craftsman* arrived in Liverpool on the 3rd February, 1964. A consignment of 7,819 × 56-lb. boxes of lard had an incorrect official certificate attached to the packages. The consignment was detained but subsequently released after consultation with the Ministry of Agriculture Fisheries and Food and the American Consulate. On 10th February, the vessel *Prinses Irene* arrived in Liverpool from U.S.A. with a consignment of 110 cartons of beef tongues. An official certificate, incorrect because of revocation on a certain date was attached to the cartons, but this date was later extended and 100% examination made at the request of the Ministry showed that all the tongues were in a state of decomposition. There was no evidence that this fault had developed in the course of transit from the U.S.A. to Liverpool. The tongues were said to have been derived from papain injected animals. The consignment was rejected as unfit for human consumption and disposed of for other purposes.

The vessel *Maj Ragne* arrived in Liverpool on the 3rd September, 1964, having on board a consignment of 32 tierces of salted hog casings. These had incorrect official certificates attached, and were re-exported to U.S.A. An identical consignment arrived on board the *Fredrik Ragne* on 21st September, 1964, with incorrect certificates. This consignment was made the subject of a "transit entry" and was re-exported to U.S.A.



Eight consignments had official certificates which were revoked on 1st October, 1964. Six of these were released on notification by the Ministry of Agriculture Fisheries and Food that the certificates were to be retained until 1st March, 1965. The remaining two were found to have undergone decomposition. One consignment was 54.7% decomposed and this part was rejected; the other consignment was examined and decomposition was found to be present. Negotiations are still in progress as to whether to submit this consignment for 100% examination or dispose of it for purposes other than human consumption.

In four other cases consignments were released on receipt of the correct certificates. In a further case, after 12.2% of the consignment had been rejected due to decomposition, the rest was released after consultation with the American Consulate.

### **Meat and Meat Products from Australia**

The vessel *Helenus* arrived at Liverpool on the 4th February, with three consignments of edible beef oleo stearine in drums. No official certificates were attached to the drums. The consignment was released on receipt of a bulk certificate signed by an officer of the Australian Department of Primary Industry, and the Commonwealth Veterinary Officer in London was informed of the situation.

In two other cases only a few casks (three and four respectively) of two consignments of ten casks had official certificates attached. The uncertificated portion in both of these cases was detained and later released for technical purposes under guarantee.

Consignments of oleo beef stearine arrived at Liverpool in September and October and two similar consignments in December. These did not bear the official certificate of the country of origin. They were released on receipt of a written guarantee from a local firm that the consignment would be used for technical purposes and not for human consumption.

On 28th December the vessel *Townsville Star* arrived in this port with a consignment of 62 cartons of frozen sheep hearts, which did not bear the official certificate of the country of origin, and a consignment of 150 cartons of frozen sheep kidneys, the accompanying certificate of which had been revoked on 1st December, 1964, by Circular FSH/20/64. Both of these consignments were detained. The consignees have taken the matter up with the Ministry of Agriculture Fisheries and Food but no action had been taken before the end of this year.



### **Meat Products from New Zealand**

Two consignments of edible beef tallow and one of edible mutton tallow arrived in March, May and June, 1964. No official certificates were attached to the drums and these consignments were released under guarantee for technical use only.

On 13th November, 1964, the vessel *Port Phillip* arrived at Liverpool and discharged a consignment of 125 drums of edible tallow. Incorrect certificates accompanied the consignment which was therefore detained, but after consultation with a representative of the New Zealand Veterinary Service who undertook to take up the matter with his Department in New Zealand it was released.

### **Meat from Canada**

On 28th April the vessel *Letitia* discharged 25 cartons of boneless bull beef. An incorrect official certificate was attached to the cartons. The consignment was released on submission of the correct official certificate by the importers.

On 13th November, 1964, the vessel *Empress of Canada* discharged a consignment of 11 cartons of frozen beef tongues, with an incorrect certificate attached to the consignment. The consignment was rejected as on examination it was found to be in a state of decomposition and there was no evidence that deterioration had occurred during transit. It was later disposed of under supervision for industrial purposes other than human consumption.

### **Meat from Argentina**

The vessel *Debrett* arrived in Liverpool on 15th January, 1964, and discharged two consignments of meat. An incorrect official certificate was attached to both consignments, and they were therefore placed under detention. They were later released however on receipt of a letter from the Ministry of Agriculture, Fisheries and Food stating that negotiations were proceeding for the recognition of the official certificate which had been altered unilaterally and which accompanied the consignment instead of the one at present recognised. A new certificate for the Argentine has now been agreed.

### **Meat from Belgium**

A consignment of meat which arrived in September on the vessel *Egret* from Rotterdam, bore the official certificate of Belgium although approxi-

mately half of the cans were marked "Produce of Holland" and the remainder "Foreign Produce". The consignment was released on instructions from the Ministry of Agriculture, Fisheries and Food, following receipt of a letter from the consignee stating that the commodity was packed in their factory in Kortrijk, Belgium, into tins supplied by their factory in Driebergen, Holland and bearing the words "Produce of Holland".

### **Meat from Brazil**

The vessel *Rubens* arrived in June with three consignments of tinned meat, having incorrect official certificates attached. These were detained and are still awaiting disposal by re-exportation or diversion for industrial use.

### **Meat from Czechoslovakia**

The vessel *Bittern* from Rotterdam arrived in July with 50 cases of canned ham without official certificates. Another consignment of meat, which had incomplete certification arrived also in July on the vessel *Clangula* from Rotterdam. Both of these consignments were re-exported to Czechoslovakia via Rotterdam.

### **Meat from Holland**

During the year five consignments of canned ham were imported. These had no official certificates attached to the packages and were said to have been originally intended for importation to the U.S.A. Two of these which arrived in January were released on production of bulk certificates signed by a Veterinary Officer of the Nederland Ministry of Agriculture and Fisheries. The other three which arrived in April (two) and May (one) were re-exported to Holland.

### **Meat from Hungary**

A consignment of canned meat, having no official certificates arrived in June on the vessel *Egret* from Holland. It was re-exported to Holland.

### **Meat Products from Iceland**

A consignment of 900 drums of edible mutton tallow arriving in the vessel *Disarfell* in November had no official certificates of the country of origin, but was released under written guarantee that it would be used for technical purposes other than human consumption.

The repeated failure, as shown by this and previous Annual Reports, by exporters of meat and meat products to comply fully with the Public Health (Imported Food) Regulations in regard to official certificate procedure is difficult to understand,



The Regulations have been in force since 1st January, 1938, and state that “ if upon the examination of any overseas article of food the medical officer of health is of the opinion that it comprises prohibited meat or any meat or meat product *without an official certificate* he shall by notice in writing forbid its removal for any purpose other than exportation” or have it “disposed of—in such a manner as to prevent its being used for human consumption”.

There can be no question of the clarity of that directive to a medical officer of health and there can be little doubt of the action which should follow the arrival of a consignment of meat or a meat product improperly certificated. It is obviously therefore the concern of the exporter to ensure the provision of the recognised official certificate of the country concerned and to make certain it is affixed by a competent authority where and when necessary as laid down by the above Regulations.

### **EGG AND EGG PRODUCTS**

The Liquid Egg (Pasteurisation) Regulations 1963 which became operative on 1st January, 1964, require all imported liquid egg to have been pasteurised and to pass the Alpha-amylase Test.

#### **Egg and Egg Products from Australia**

The vessel *Somerset* arrived from Australia in March with a consignment of frozen liquid egg—the first since the coming into operation of the above mentioned Regulations. Samples were submitted to the Public Health Laboratory for application of the alpha-amylase test. The results were satisfactory, bacteriological examination for salmonellae was negative and a second consignment in December was equally good.

#### **Egg and Egg Products from U.S.A.**

One hundred and fifteen samples were taken from 15 consignments of granulated or flake-dried egg albumen. One sample showed *Salmonella montevideo* present and three had *Salmonella infantis*. The consignments were detained and later released for heat treatment and the Medical Officers of Health concerned with the supervision of this treatment were informed.

One of seven samples taken from three consignments of spray-dried egg albumen was found to contain *Salmonella oranienburg*. The infected consignment (five packages) was returned to the U.S.A. after being rejected here as unfit for human consumption.



A consignment of cake mix containing egg arrived in April. Examination revealed the presence of *Salmonella oranienburg* in one sample. In addition a sample submitted to the City Analyst revealed the presence of 500 parts per million of sodium lauryl sulphate. This substance was listed on each packet among the ingredients, but is not permitted by the Emulsifiers and Stabilisers in Food Regulations, 1962, and the consignment was therefore rejected as unfit for human consumption and was buried at a local tip.

### **Egg and Egg Products from China and Hong Kong**

One consignment of spray-dried egg yolk and 20 consignments of egg noodles were found to contain no salmonellae and were therefore released.

### **Frozen Egg Yolk from Eire**

A consignment which arrived in Liverpool from Dublin in April consisted of 600 cartons, each containing 2 x 28-lb tins. It was described as "Frozen Egg Yolk".

A sample was taken and sent to the City Analyst. Upon consideration of his report it was decided that the consignment was not subject to the Regulations mentioned above. "Liquid egg" is defined in the aforesaid Regulations as "any mixture of yolk and albumen, other than reconstituted dried egg, and includes any such mixture which is frozen, chilled or otherwise preserved".

Fifteen samples were examined for salmonellae. None were found positive. The consignment was released.

## **CRUSTACEA**

There were landed at Liverpool during 1964, 55 consignments of crustacea, some of rather remarkable descriptions, such as frozen prawns (headless shell-on), frozen peeled de-veined shrimps and frozen, headless, peeled de-veined shrimps, and 33 of them were of Japanese origin. These Japanese exporters have, within the past two years, attained an excellent hygienic standard in their products of this type and this high standard has resulted in none of their consignments being rejected.

From South America we had seven consignments of which 5 were from Chile and one each from British Guiana and Brazil. All of these after examination and sampling were found to have satisfied our requirements and were released for human consumption.

Hong Kong exported six consignments to this country through Liverpool, two of which were most unsatisfactory. One was taken to a local tip for total destruction while the other was returned to the exporter. Two from Barbados were examined and sampled and one failed the tests. It was declared as unfit for human consumption and the consignee chose to return it to the exporter in Florida.

North Korea and South Vietnam each sent crustacea for the first time to Liverpool. A single consignment came from each country and these were carefully examined and sampled. The North Korean produce was accepted but the standard of the other was not satisfactory and was returned to the exporter. Both exporters, however, were advised of the standards acceptable to this Authority and that these high standards must be maintained.

It will be appreciated that standards attained by exporters of this produce vary considerably and it will have been noted by the foregoing reports that a high level of cleanliness is possible and it is therefore the concern of the importers to ensure that they obtain imports of this foodstuff as free as possible from infection and maintain it in a good condition until sold for consumption. Failure to do this may cause a serious outbreak of food poisoning.

In October the vessel *Leinster* discharged 101 bags of fresh mussels, and the accompanying certificates did not state that the mussels had been purified at an approved cleansing station. Examination was made, decomposition found and the mussels were rejected as unfit for human consumption. They were, however, released for use as bait to the fishing industry.

## **FRESH FRUIT AND VEGETABLES, ETC.**

### **Levelited Butter Beans from Madagascar**

Throughout the year 1964 butter beans which had been treated with levelite, an undesirable insecticide, continued to arrive from Madagascar, and 37,985 bags were discharged from 12 ships. About two-thirds of these were delivered to local establishments for cleaning. The remainder was delivered to canneries outside the jurisdiction of this Authority for washing under supervision.



A difficulty in connection with the cleaning of the above beans was dealt with during the year by the Health Department and the firm concerned. As a result, the standard of cleaning has been much improved.

### **Carrots from Cyprus**

The vessel *Marie Horn* discharged a cargo of 42,091  $\times$  28-lbs bags of carrots in June. Inspection showed that the contents of a high percentage of the bags were in a state of decomposition. In all, 7,212 bags (17% of the consignment) were rejected and destroyed by burying at Sefton Tip.

A consignment of 52,783  $\times$  18-lb bags of carrots from the vessel *Baltic Swift* which arrived in June, showed evidence of decomposition. The affected carrots 37,540 bags in all, were rejected as unfit for human consumption and destroyed at a local tip.

### **Potatoes from Cyprus**

Two consignments of potatoes arrived in April and May. They were not rejected for human consumption at the time of their arrival, but because of certain licensing restrictions, their importation was prevented by a Government Department and they were warehoused in the dock area. The consignee succeeded in disposing of only 1,818 bags for use as ships stores. The remaining bags were inspected in September and found to have deteriorated, so that they were rejected as unfit for human consumption. They were disposed of by being buried in a local tip.

### **Potatoes from Egypt**

A consignment of 64,000  $\times$  28-lb. bags of potatoes was landed from the vessel *Alonso de Ojeda* in May. Some of the potatoes were unfit for human consumption because of decomposition. Of these, 54,740 lbs were destroyed at a local tip and 26,168 lbs. were released under guarantee for pig feeding.

### **Pears and Apples from Canada**

Three consignments of fresh apples were landed in February from the vessel *Beechmore* and samples were taken as an informal check upon insecticide spray residues and the use of preservatives in connection with Canadian apples. Two consignments showed no infringement. The third did show infringements of the Arsenic in Food Regulations, 1959, and of the Lead in Food Regulations, 1961, in that 1.3 parts per million of arsenic and 3.7 parts per million of lead were present as residues upon the skins of the fruit. The permitted limits are 1 part per million and 3 parts per



million for arsenic and lead respectively. Enquiries showed that the apples had been distributed to the trade before the City Analyst's reports had been received. The Canadian Government Trade Commissioner was contacted with the object of preventing any such infringement of the Regulations in future.

In September, 58% of a consignment of 258 cartons of pears from the same vessel were found to be decomposed. They were rejected as unfit for human consumption and later destroyed at Sefton Tip.

### **Fruit and Vegetables from the U.S.A.**

The vessel *American Harvester* arrived in May with a consignment of 108 × 1-lb. packets of "Hush-Puppies", said to consist of "corn meal, flour, vegetable oil, whole eggs, onions, dry milk, salt, sugar and baking powder". The contents of the packets were contaminated by extensive growth of mould, and 100% examination was carried out which resulted in the whole consignment being rejected and delivered to Sefton Meadows Tip for total destruction under supervision.

The vessel *Canada* discharged 12,700 boxes of fresh apples in January. On inspection a large number of the boxes was found to be contaminated with a greyish-white granular substance which in many instances had penetrated the boxes and come in contact with the fruit. On investigation it was discovered that a refrigerated space containing the affected apples had been contaminated by a quantity of borax stowed on the deck above. This had occurred due to defect or accident in connection with the hatch covers.

Samples were sent to the City Analyst, who reported that contamination was due to a very soluble form of borax to the extent of 35 parts per million, estimated as boric acid. After washing, the amount of the contaminant was reduced to less than one part per million. He recommended that the fruit should be washed and repacked. Arrangements were made to have this done, under supervision, outside this area.

The London Port Health Authority was also informed that further consignments from the contaminated space would later be discharged when the ship arrived in London.

### **GROUNDNUTS**

The annual consumption of shelled groundnuts, possibly better known as peanuts, in this country is between 22,000 and 25,000 tons and

approximately 12,000 tons of this category of nuts are imported through Liverpool. The annual imports of groundnuts in shell is very much less, is seasonal and amounts to about 1,000 tons through this port. These nuts in shell come mainly from Tripoli, Libya, Eritrea and Israel, while the groundnut kernels are mainly from India, Egypt, South Africa, Northern and Southern Rhodesia, Brazil and Tanganyika. About 100,000 tons of lower grade groundnuts both in shell and decorticated are landed annually at Liverpool for animal feeding and oil expression.

It has been the custom in the port to check the discharge of consignments of this commodity and any nuts spilled from damaged bags and in any way thought to be contaminated by dirt have been collected, put under detention, and later released for animal feeding purposes under guarantee.

During the year a total of 26,979 lbs. of these dirty loose collected nuts was dealt with in this way. Two consignments of groundnut kernels were discharged in May and July. Both were found on inspection to be affected to a serious degree by mould and were totally rejected for human consumption. The total involved in this rejection was 606 bags weighing 67,872 lbs. A new procedure was introduced later in the year with regard to groundnuts in shell as the result of certain incidents of extensive laboratory investigations and findings which have taken place and which are described below:—

In Britain during 1960, outbreaks of an apparently new disease occurred in young turkeys causing many deaths in a period of a few months. As the nature of the disease was at the time obscure, it was called "Turkey X" disease, although it was found that other domestic birds were dying from the same pathological condition.

Investigations into this disease soon showed that the common factor in all the outbreaks was the presence in the feeding material of groundnut meal and tests on samples of groundnuts from many countries showed widespread distribution of the toxic factor and suggested that the cause of the trouble might be contamination by a micro-organism. This was finally proved and a strain of the common mould *Aspergillus Flavus* named as the responsible agent. In view of its origin, the toxic factor was given the name "aflatoxin".

It has been shown that production of aflatoxin is dependent on a moisture content of about 9% in the kernels and that undamaged shells inhibit the



growth of *Aspergillus Flavus* to some extent. This has been borne out by the results of samples of edible hand-picked selected (H.P.S.) grade nuts from various countries none of which was found to be toxic. Only groundnuts in shell have been found to be affected probably because the kernels are kept moist: the growth of the mould follows damage to the shell.

There is no scientific evidence to suggest that human beings have suffered ill effects from the consumption of groundnuts contaminated with aflatoxin or of products manufactured from such nuts but certain effects on Rhesus monkeys have been found, and at a meeting held in the Ministry of Health on 1st June, 1964, certain seaports including Liverpool were requested to undertake sampling of groundnuts in shell in order to ascertain whether aflatoxin was present in the nuts and if so to what extent.

Preliminary talks were held with the City Analyst and the Port Medical Officers in relation to sampling procedure. The Health Committee agreed to the purchase of special equipment by the City Analyst and the first samples were drawn on 27th October, 1964, at South Sandon Dock.

The vessel *Mahseer* discharged a consignment of 4,000 bags which was sampled at the 2% level. This rate of sampling gave 80 bags at random from the bulk pile and then, for ease of handling and to ensure the thorough mixing required to obtain a representative sample these were divided into four lots of 20 bags. From each lot a sample of approximately 1 lb., was taken from every bag making 20 lbs. in all and these 20 lbs. were mixed in a clean sack provided by the consignee. About 6 lbs. were taken from this bulk sample, placed in a polythene bag, numbered and sent to the City Analyst.

A further sample was taken and handed to the consignee while the balance, bearing the same sample number, was taken to the Port Office and retained pending the result of the analysis. This procedure was repeated with each of the remaining three lots of 20 bags making a total of four samples for the Analyst.

Results were received on 3rd November which showed that the groundnuts had been found to contain less than 0.05 p.p.m. of aflatoxin, a standard which had been agreed at a meeting in the Ministry of Health on 14th October, and, as the consignment had satisfied the standard, it was released. Another consignment of 1,400 bags was similarly sampled that day and after sample results were obtained, was also released. From the



commencement on 27th October to the end of the year 12 consignments of groundnuts in shell were imported totalling 32,000 bags weighing 395 tons. Twenty-seven samples were drawn from 534 bags, and sent for analysis. Fortunately none exceeded the permitted standard of 0.05 p.p.m. aflatoxin and the consignments were therefore released.

It should be noted that if an importer of a rejected consignment of groundnuts decides to send it for animal feeding the Medical Officer of Health of the area in which the consignee's business is situated will be informed and a copy of this information will be sent to the Ministry of Agriculture, Fisheries and Food.

### **Cocoa Beans from West Africa**

Two consignments of this commodity arrived here in December, 1963. A total of 38,600 bags had to be examined following a quay check which showed the contents of many bags to be wet and mouldy. Three hundred and ninety-three bags representing 55,020 lbs. of beans were finally rejected and were exported to Holland in the vessel *Amstelstroom* which sailed from Liverpool at the end of January, 1964.

## **CANNED GOODS OTHER THAN MEAT**

### **Mangoes from India**

The vessel *Indian Success* discharged four consignments of mangoes in January. Examination showed that many of the tins were blown or burst. After a 100% examination, 35% of the total was rejected. This included 97% of two of the mango preparations in the consignments. The rejected tins were destroyed at Sefton Tip.

### **Canned Fruit Salad from Italy**

A consignment of 1,400 cartons was landed in October and found to contain a large number of stained cartons, due to the tins bursting. As a result of a 100% examination, 10.1% of the tins were rejected.

### **Canned Grapefruit from Israel**

Examination of a consignment of this commodity in April showed that some of the tins had been perforated in the process of embossing the code numbers on the tins. The affected tins, 5% of the total, were rejected as unfit for human consumption and were delivered to Sefton Tip.

### **Canned Fruit from U.S.A.**

In August, a consignment of canned prepared fruit (blueberry) was landed from the vessel *Ivernia*. On examination it was found that the ingredients included 0.1% of sodium benzoate. This is the equivalent of 850 parts per million (permitted amount—800 parts per million). A sample was submitted to the City Analyst. His report showed that only 610 parts per million were present. The matter was brought to the attention of a representative of the importing firm, who agreed to correct the error in the labelling and to see that future consignments conformed to the Regulations. The consignment was released.

### **SWEETENED CANNED ORANGE NECTAR FROM SPAIN**

During the year five consignments of orange nectar arrived at the port in January (two), May (two) and August. These were not sampled on arrival. In December however, following a request from the Ministry of Health samples were taken, as it had been found that a sample taken in another area showed the presence of lead in quantities exceeding the statutory limit laid down by the Lead in Food Regulations, 1961. The results of samples submitted to the Public Analyst, showed that the contents of the 106 fluid oz. tins were satisfactory, but that the 19-oz. and the 46-oz. tins contained more than the permitted amounts. These tins were rejected as unfit for human consumption and are to be re-exported to Spain.

### **Canned Cauliflower from Holland**

In June the vessel *Bittern* landed a consignment of 200 cartons of canned cauliflower. The City Analyst's report on a sample showed that the cans contained added preservative, sulphur dioxide, in contravention of the Preservatives in Food Regulations, 1962. The consignment was rejected and re-exported to Holland.

### **Instant Potatoes from U.S.A.**

Two consignments of dehydrated instant potatoes one of 13,800 × 1-lb. tins and one of 120 × 5½-lb. tins arriving in August, were found to have B.H.A. and B.H.T. (Butylated hydroxyanisole and Butylated hydroxytoluene) added as preservative, in contravention of the Antioxidant in Food Regulations, 1958, which permit these substances only in certain specified foods. The consignments were returned to the U.S.A.

In November another consignment of instant potatoes arrived. The list of ingredients included sodium sulphite but no mention was made of B.H.A.



or B.H.T. A sample submitted to the City Analyst confirmed the absence of the aforementioned substances and showed that the amount of sodium sulphite, expressed as sulphur dioxide, was only 200 parts per million, which is below the permitted level of 550 parts per million. This consignment therefore conformed with the Regulations.

### **DAMAGED CARGOES**

The m.v. *Kittiwake* arrived in the Mersey on Monday, 27th July, and berthed at S.E. Queens Dock at about 12.30 hours. The voyage from Rotterdam, which had taken approximately two and a half days, had been uneventful and shortly after berthing a start was made to discharge the miscellaneous cargo made up, among other things, of bales of raw cotton, cases of canned meat and fruit, and packages of food, and the unloading continued until 17.00 hours that day. This vessel was, however, to give to the Port Food Inspectors of this Authority one of the most difficult and almost insolvable tasks ever presented to them. At 19.50 hours on the 28th July, fire was discovered in the bales of cotton and for 18 hours the fire service struggled with the burning and smouldering cargo and at last took control of it. Damage to the cargo was extensive and the slow, dreary and depressing work of discharging all of it to the quay was soon started.

All the food materials landed were of course the primary concern of the food inspectors and their first task was to separate all the severely damaged cargo, so grossly affected by heat, smoke, water or other contamination, that any hope of salvage was out of the question, and have it transported directly to a local tip where it was then completely destroyed under supervision.

It soon became clear, however, that the contents, mostly in tins, of a further large number of cartons, etc., would require close and careful scrutiny if any was to be recovered and all goods found by the inspectors to be in this category were transferred to a dockside warehouse for further attention.

The next step, and one complicated by the large number of consignments of foodstuffs in the cargo and the large number of consignees interested in them, was to attempt to identify and sort this mass of charred, singed, waterlogged and to inexperienced eyes hopeless chaos, into something like order. Broken, burned and charred containers, cartons, and cases,



some without any identifying mark, mixed with loose tins in all stages of damage and many without labels (these having been burned, soaked or washed off) had to be examined closely and carefully and it can be said without doubt that only the very considerable experience of our food inspectors made it possible for them to identify, frequently only by the shape or size or a partially obscure embossed mark, a particular tin and so allocate it to a particular consignment. Their persistence at this disagreeable work, done in addition to daily and routine port duties, finally allowed sorting to mark to be completed.

A further complication now arose in regard to the canned meat and meat products (details of which are given with other canned goods in Table below) when it was established that these would require to be placed in two categories, namely those which during the canning process had been submitted to high temperature treatment called sterilisation, and those which had been subjected to the lower temperature treatment of pasteurisation. The existence of this latter category was confirmed by the discovery of some partially destroyed labels bearing words which indicated the product should be kept under refrigeration and it was decided then that in respect of the sterilised products it would be safe to pass, as fit for human consumption, the contents of these cans which upon physical examination showed no evidence of damage.

In the case of the pasteurised meats however it was realised that a special problem existed and that consideration would have to be given to certain factors, namely the time interval between discovery and control of the fire, the proximity of these products to the seat of the fire and lastly the time likely to elapse after release and eventual retail sale to the consumer. It was considered that there was a risk that spoilage and possibly pathogenic organisms could have multiplied in the meat as a result of the prolonged period of heating and this risk would extend even to those packages which exhibited no evidence of fire damage. It was realised too that the optimum temperature which would favour the multiplication of such organisms would not necessarily give rise to external damage to the cans and thus in such cases the inspector would be without evidence upon which to base an opinion of fitness for human consumption on the contents.

A decision was quickly made after consideration of the above factors that any of the pasteurised canned meats which showed no evidence of damage

or other indication of unfitness on physical examination could only be released without risk to consumers provided all cans were opened, the contents inspected, any meat showing the slightest evidence of spoilage rejected and the remaining sound material sterilised and repacked before sale for human consumption. Sterilisation could, of course, be carried out at any establishment approved by and under the supervision of the medical officer of health of the area in which it was situated, and on receipt of his permission by this Authority to send it into the area under his jurisdiction. Letters indicating our requirements were sent to all persons actively concerned and it is of interest to note that the value of our decision in regard to the pasteurised cans was borne out even before the persons mentioned above could take action. Many cans began to show external evidence of spoilage and were rejected by our inspectors in the dockside warehouse.

Difficulties were experienced in the disposal of material for reprocessing even to the extent of a processor failing to satisfy his medical officer of health of the results of his work and the packages having to be returned into our area for re-direction to another processor who later completed the necessary work satisfactorily.

The success of an undertaking such as the one just described can only result when understanding, and co-operation exist between all those concerned and this Authority acknowledges with many thanks the assistance received from them.



TABLE

The vessel Kittiwake from Rotterdam 27.7.64. Table showing food cargo, rejected foods, and conditional releases.

Commodity	Quantity in ship	Quantity rejected	Quantity released for reprocessing
Canned evaporated milk ... ..	200 cartons ...	175 cartons and 19 tins=7,246 lbs.	None
Canned fruit (raspberries and strawberries)	250 cartons ...	136 cartons and 19 tins=2,481 lbs.	None
Canned anchovies ... ..	40 cartons ...	2 cartons and 50 tins= 31 lbs.	None
Cases of salami sausage ... ..	10 cases ...	10 cases = 550 lbs.	None
Cartons of rusks ... ..	1,300 cartons ...	1,300 cartons =4,237 lbs.	None
<b>Sterilised canned meats</b>			
1. Pork luncheon meat ... ..	500 cartons ...	20 cartons and 7 tins= 235 lbs.	None
2. Canned ham ... ..	1,175 cartons ...	49 cartons and 22 tins=1,143 lbs.	None
3. Canned ox tongues ... ..	446 cartons ...	39 cartons and 2 tins=2,566 lbs.	None
<b>Pasteurised canned meats</b>			
1. Canned hams ... ..	1,863 cartons and cases	421 cartons and 4 tins=23,848 lbs.	497 cartons and 1 tin exported to Holland for reprocessing under guarantee. 944 cartons and 1 tin released to London and Chorley for reprocessing under supervision.
2. Canned pork loins ... ..	50 cartons ...	12 cartons and 5 tins= 450 lbs.	37 cartons and 7 tins released to London and Chorley for reprocessing under supervision.
		TOTAL=42,787 lbs.	1,478 cartons and 9 tins.

Part of a cargo of 6,000 tons of rice from U.S.A. in the vessel *Ervia* in April was found to have been damaged by contact with bilge water. The damaged rice was either contaminated, decomposing or tainted. Altogether 351 tons were rejected as unfit for human consumption and most of this was exported to Holland. 12.8 tons were released in this country under guarantee for use as animal food.

A fire occurred in No. 2 hold in the vessel *City of New York*, while calling at Dublin on her way from Kenya. The cargo in that hold was badly damaged, and included 268 bags of cinnamon bark, as well as a quantity of hides. On inspection at Liverpool the hides were in a state of decomposition and the cinnamon bark was wet and contaminated by the foul liquid from the hides. These commodities were taken to a local tip and completely destroyed.

In January the vessel *Lismoria* discharged 10,670  $\times$  140-lb. bags of Canadian wheat flour. Bags from one hatch were contaminated with a black powder and enquiries revealed that the space concerned had previously had in it a number of bags of carbon black. The contents of 2,345 bags were rejected and 100 of these bags were delivered to a firm for conversion into pet foods. The remainder were released for conversion into starch products. The public health inspectors of the districts concerned agreed to check the disposal.

A consignment of 28,500 bags of onions from Canada in November was found to have become contaminated by a chemical, monoethanolamine which had formed part of the ship's cargo. The consignment was rejected and delivered to a local tip for destruction.

In September, the vessel *Gloucester* landed consignments of sultanas and citrus peel, which were found to be damaged by water. 1,001 cartons from a total of 21,890 cartons of sultanas and 40 cartons from a total of 600 cartons of mixed citrus peel were rejected as unfit for human consumption. The cause of this damage was said to be that the ship had had a rough passage during part of her voyage and had shipped a quantity of sea water.

The vessel *Pyrrhus* from Japan, Hong Kong and Singapore docked in West Huskisson Dock on 11th November, 1964. At 3 p.m. on the following day fire was discovered in No. 3 hold. Firefighting continued throughout the night and most of the next day, so that the cargo in No. 2 hold was also



damaged by water. Salvage operations were hampered by latex which melted and caused a black sticky mess, almost impossible to remove. The only foodstuffs in these hatches were 750 bags of tapioca and sago and 5,480 cartons of canned pineapple. The tapioca and sago were very wet and dirty and were sold for animal feeding under guarantee. About one sixth of the cartons of canned pineapple was rejected, the rest being released.

## **IMPORTATIONS OF FOOD OTHER THAN FOR HUMAN CONSUMPTION**

### **The Meat (Staining and Sterilisation) Regulations 1960, and the Food and Drugs (Whalemeat) Regulations, 1949/1950**

The increase which has been taking place during the past few years in the importation of raw materials which are sent to establishments for sterilisation and processing by canning for ultimate sale to the public as pet food, continued to be a notable feature. This year a total of 636 consignments, comprising 524,755 packages including 17,526 packages of whalemeat and whale offal, and 7,286 packages of horsemeat and horse offal, was imported. The extent of this increase is revealed by reference to the Annual Report for 1960, which shows that only 196,399 packages were imported in that year. Most of this material was unfit for human consumption and was imported subject to the provisions of the Meat (Staining and Sterilisation) Regulations, 1960.

The vessel *Plate Clipper* from Argentina arrived on 21st January with three consignments of horsemeat. Out of a total of 35 samples only eight were free from salmonellae.

The other 27 were affected as follows:—

- 11 by *S. havana*
- 8 by *S. anatum*
- 1 by *S. derby*
- 3 by *S. oranienburg*
- 2 by *S. minnesota*
- 1 by *S. meleagridis*
- 1 by *S. derby* and *S. anatum*

The consignments were released for sterilising before sale as pet food in accordance with the Regulations.

Another consignment from the vessel *Debrett* had ten samples taken and all had salmonellae present. Similar action was taken in this case.

## EXCHANGE OF INFORMATION

We have continued to circulate information concerning positive findings, following examination of imported food, to other seaports and copies of this information are sent to the Ministry of Health and the Ministry of Agriculture, Fisheries and Food.

Quarterly returns are made to the Ministry of Agriculture, Fisheries and Food giving full details of unsound imports of meat and meat products and also of contraventions of the Official Certificate procedure, both of which are discussed earlier in this report. Copies of any details, relating to unsound Australian meat or meat products are sent to the Commonwealth Veterinary Officer, Australia House, London.

The following table shows the total quantities of unsound foodstuffs either destroyed or utilised under supervision during the year 1964:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal ... ..	34	18	—	—
Canned Goods ... ..	246	17	2	26
Fruit and Vegetables ... ..	2,689	3	—	15
Cereals ... ..	1,671	5	—	—
General (Lard, Coconut, Butter, etc.) ...	869	6	—	—
Total ... ..	5,511	9	3	13

A total of 40 tons 1 cwts. 3 qrs. 11 lbs. of unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year, and suitably disposed of to local refiners for reconditioning, by refining.

The following tables show the variety and numbers of samples submitted to the Public Health Laboratory Service and the City Analyst during the year 1964.

### Samples relating to imported food

#### *Submitted to Public Health Laboratory Service*

Beef, canned, corned ... ..	4
Cake Mix, containing egg ... ..	5



Desiccated coconut	...	...	...	...	...	557
Egg, frozen and dried	...	...	...	...	...	164
Egg noodles	...	...	...	...	...	39
Ham, canned	...	...	...	...	...	10
Horseflesh	...	...	...	...	...	45
Lobster, frozen	...	...	...	...	...	17
Mutton, frozen boneless	...	...	...	...	...	9
Prawns, frozen and dried	...	...	...	...	...	130
Shrimps, frozen and dried	...	...	...	...	...	101
Tomatoes, canned	...	...	...	...	...	5
Tomato concentrate	...	...	...	...	...	2

*Submitted to the City Analyst*

Apples	...	...	...	...	...	4
Beef, canned, corned	...	...	...	...	...	19
Beef tallow edible	...	...	...	...	...	4
Blueberry	...	...	...	...	...	1
Cake Mixes, containing egg	...	...	...	...	...	2
Carrots, dehydrated (Cubes)	...	...	...	...	...	1
Cauliflower	...	...	...	...	...	2
Egg yolk, frozen	...	...	...	...	...	1
Groundnuts in shell	...	...	...	...	...	16
Ham and Pork, chopped, canned	...	...	...	...	...	5
Lemons	...	...	...	...	...	1
Onions, canned, dehydrated and kibbled	...	...	...	...	...	10
Oranges	...	...	...	...	...	6
Orange nectar	...	...	...	...	...	5
Peanuts in shell	...	...	...	...	...	11
Pecan nuts	...	...	...	...	...	2
Pineapple pieces in syrup	...	...	...	...	...	3
Potatoes, instant, dehydrated, canned	...	...	...	...	...	5
Tea	...	...	...	...	...	15
Tomatoes, canned	...	...	...	...	...	14
Wheat flour, bags	...	...	...	...	...	1

**Samples relating to investigations following food-poisoning and other illness within the Port**

*Submitted to the Public Health Laboratory Service*

Ships' drinking water	...	...	...	...	221
Food, various	...	...	...	...	23

**In addition to the above, the following samples were submitted for bacteriological examination**

Faeces	...	...	...	...	241
Surface swabs (equipment)	...	...	...	...	28

**ACKNOWLEDGEMENTS**

I desire again to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, Ministry of Transport, the Mersey Docks and Harbour Board and their officers, river pilots, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

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